

Edgar F. Cyriax

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THERAPEUTIC POSSIBILITIES OF MANUAL ADJUSTMENT.*

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Modern medicine is rapidly putting into practice the adage "treat the patient, not the disease." To remove the cause is the keynote of the modern method of treating disease, in contradistinction to that prevalent custom of the past, symptomatic treatment. When we found the statement in medical works, and it must be admitted that it was too often, "treat the symptoms as they arise," we knew it meant that science had not solved the riddle of the particular disease under consideration. Nowadays more frequently do we find this rule superseded by advice to search for some underlying causal factor.

"Structure precedes function," is the motto of those diagnosticians whose philosophy includes a mechanical pathology. If histology is a study of microscopic normal anatomy, and pathology a study of microscopic diseased anatomy, then it follows, according to the mechanical or anatomical school of practice, that morbid anatomy is a primary factor in etiology, hence adjustment of this morbid anatomy is a logical therapeutic procedure. Granting the logic of this contention, merely for the purpose of this paper, let us consider the subject of mechanical diagnosis of the cause of perverted function, and the methods of application of the technic of adjustment as a therapeutic measure.

At the last session of the American Medical Association no subject received more lively attention

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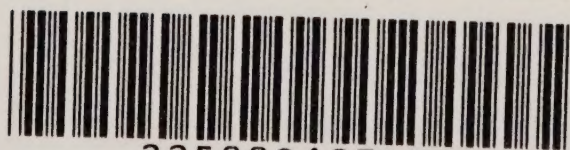
Smith: Manual Therapeutics.

and caused more earnest discussion than the question of the absolute necessity of establishing a department of physical therapeutics in medical schools. Eminent speakers declared this was a vital measure, owing to the growth of therapeutic nihilism in the profession, the widespread loss of faith by the public in medicines and surgery, and last, but not least, because of the phenomenal growth of osteopathy and other methods of treatment. The equipment of all the great general hospitals with elaborate and expensive Zander apparatus and various other physical appliances, also shows the trend of modern medical thought.

A school for postgraduate instruction in spondylotherapy has been established, and several editions have been published of a work with the same title, describing a new school of practice based entirely upon mechanical, electrical, and thermal stimulation of spinal nerve centres. The first annual convention of the American Association for the Study of Spondylotherapy is announced for this month (November, 1912).

To-day the orthopedist and the surgeon are both extending the limits of their fields and including the treatment of innumerable organic and functional disorders which no one would have dreamed of classifying under their specialties a few years ago. It is natural for both specialists to conceive disease from the mechanical standpoint. They are mechanics, and the better mechanics they are the more radical and far seeing they will become in the application of their philosophy to the treatment of disease.

But there comes a parting of the ways. The surgeon is looked to for operative interference, for the use of the knife. The orthopedist is appealed to for the construction of apparatus to be worn for corrective purposes and for surgical operations upon bones and joints, and for static purposes and for the prescribing of gymnastics, massage, etc. Now we come to the plea set forth in the title of this paper,



namely, "manual adjustment." The surgeon cuts with his knife and the orthopedist moulds with his plaster casts. But is there not something left undone? Are they not limiting both their field of diagnosis and their therapeutic procedures? Why neglect the most perfect of all instruments? What knife or plaster has the intelligence of the human fingers? Every patient is a case in himself. Routine treatment is becoming a thing of the past. The skillful operator has brains in the ends of his fingers.

What palpation is to diagnosis, manual adjustment is to therapeutics. When all is said and done, does not the skillful diagnostician finally resort to the court of last appeal, his fingers? Does he not feel of the patient again, bearing in mind all the laboratory findings and the past history, in order finally to size up the situation and form his conclusions? Conversely, is it not instinctive, actually to take hold of an ailing body and attempt to fix it?

Anatomy and physiology are mechanical, and the microscope shows us that pathology is nothing more or less than the mechanism of disease, so it can be argued most logically that the scientific treatment for faulty mechanical conditions, be they macroscopic or microscopic, should be mechanical. The general practitioner of medicine readily grants the orthopedist his field for the correction of gross deformities, and in this latter day revolution in practice is even considering that mechanics may be a factor in disorders of nutrition due to ptoses, etc. But, unless he has permitted his scientific imagination to soar a bit, he may not be willing to admit the efficacy of mechanical treatment for remote, obscure, systemic or organic diseases. Yet it is not mechanical physicians alone who have admitted the possibilities of adjustment for diseases of internal organs. For instance, no less a person than Richard Cabot, in the last edition of his *Case Histories in Medicine*, published last year, made a startling statement regarding that most intractable and tragic

disease, angina pectoris. He said: "A masseur or an osteopath sometimes cures or greatly relieves patients whom regular practitioners have failed to help. We are much in need of further light in this direction." Dr. Henry R. Harrower, of Chicago, in the discussion of a paper which it was my privilege to read at a recent session of this association, declared that he had personally witnessed the re-establishment of cardiac activity in apparently moribund cases of pneumonia by the application of percussion to the spine in the upper dorsal area. At the same meeting, a member from Ohio astonished his hearers by stating that he had been cured of a chronic appendicitis by osteopathic adjustment of a lower dorsal vertebra, after a number of physicians and surgeons had failed in their treatment and had appealed to the knife as the court of last resort. Dr. Albert Abrams, of San Francisco, cites innumerable cases of great variety, including such unbelievable instances as aneurysm of the aorta cured by spinal treatment.

In last week's number of the NEW YORK MEDICAL JOURNAL the doctors Cyriax, of London, in an article replying to certain statements made by the writer before this association, cites countless eminent European authorities in support of various mechanical stimulations and inhibitions of the abdominal sympathetic "for the treatment of a very large number of both thoracic and abdominal complaints, including cystitis, paralytic bladder conditions, irregular menstruation, impotence, leucorrhea, prolapsus ani, catalepsy, dyspepsia, chronic gastritis, etc." While the doctors Cyriax disagree with the writer over the question of priority of such application of mechanics for visceral disease, the latter would pay the highest tribute to the splendid work done by these English specialists in their method, and would raise only the question of the relative value of the two different procedures in question. Their method is confined exclusively to mechanical treatment of the nerve centres them-

selves, while the writer has always emphasized instead the far greater value, for permanent results, of the adjustment of the skeletal structures which are found often to cause interference with the nerves at their spinal origin or to create vasomotor interference with the arterial or venous supply of the sympathetics.

In Chicago the A. T. Still Research Institute is now established in a building of its own and has an endowment of a quarter of million dollars contributed by osteopathic physicians for the exclusive purpose of research along the lines of structural derangement as a cause of disease and adjustment as a therapeutic agent.

As an instance of one of the frequent causes of mechanical derangement of the skeletal structure, and one of the sort of cases which can be definitely traced from the standpoint of etiology, symptomatology, and therapeutics, because the exact date of the causal factor can be so definitely fixed, stand conspicuously those static skeletal lesions produced secondarily to prolonged general anesthesia. These conditions are usually overlooked because the attention of the attending physician, the consultants, and the surgeon is focused upon the complaint which has been found sufficiently serious to necessitate surgical interference. Take, for instance, this case: Two years ago the patient had a successful abdominal operation; complete loss of memory has persisted ever since, but no consultant has ascertained why. No consultant has ever made any complete physical examination to ascertain the cause, but all have confined their attention to the field of the surgical operation. A week ago this case was examined from the mechanical standpoint, disclosing the fact that upper cervical mobility was markedly limited in every direction. In the two upper cervical articulations there were adhesions and specific subluxations. Radical reduction was successful, adhesions easily were broken down, and mobility was restored in one operation. It was my pleasure to

see this case two days ago and to receive the report that memory is returning rapidly.

On this same line, it was interesting to hear Doctor Roberts at the New York Post-Graduate Hospital, only yesterday reiterate the statement that relaxation of articulations, particularly the sacroiliac, frequently occurred during prolonged general anesthesia and particularly during the enforced recumbency of convalescence, resulting in severe subjective symptoms. Doctor Goldthwaite, of Boston, has also called attention to this point. In the orthopedic department of the Massachusetts General Hospital the writer was shown a practical prophylactic device. A plaster of Paris mould is taken of the patient's dorsal, lumbar, and sacral area before operation, and covered with felt. The patient rests in this firm cradle during the operation and during convalescence, thus preventing relaxation, strain, or subluxation and the consequent backache and weakness. The writer always uses this procedure in major surgical cases, finding it particularly important in cases where the stirrups are used for a prolonged period, as this position flexes the thighs to the extreme and consequently rotates the pelvis backward, obliterates the lumbar lordosis, and brings great strain on the sacroiliac ligaments.

Doctor Rogers, in a clinic at the Massachusetts General Hospital this summer, said that in his researches he had never found a single case of primary sciatica, every case being secondary to sacroiliac strain. He declared that in his belief there were no cases of primary sciatica.

The most severe case of "renal colic" which it has been the fortune of the writer to see, one attended by a dozen members of the staff of a great Boston hospital, where surgical interference was the unanimous advice after exhausting all other regular procedures, was cured instantly by manual adjustment of the ninth dorsal vertebra, which was palpably out of its normal position. Frequent reports during the past five years are that there has been

no recurrence of the colic and the patient has been in robust health.

In the New York Orthopedic Hospital, outpatient clinic, yesterday, the writer observed that in the many cases examined there was always a relation between the vertebral pathology and the complaint.

What, then, is the therapeutic possibility of manual adjustment? For answer take a bird's eye view of the body as a whole, not the classical method of inspection, but from the viewpoint of the mechanics of the body rather than from the conventional standpoint of so called physical diagnosis, which means an attempt to name a disease, rather than an endeavor to find errors of static or motor mechanics.

Inspect poise, posture, gait; find the centre of gravity, record overdevelopment or underdevelopment, spasticity or atrophy, mobility or immobility, ankylosis or stretched ligaments, local anesthesia or hyperesthesia, etc. Estimate the values mechanically. Get the proper sense of proportion. What is the general picture, not by the traditional clinical method, but from the standpoint of human mechanism? Where is the greatest strain, dorsal, abdominal or pelvic? Is visceral ptosis an obvious factor?

Most vital should be the observation of the central spinal axis. Use the plumb line. Do not take the superficial method of trying with the plumb line down from the upper cervical region to ascertain the vertical alignment, but the reverse. With the plumb line in the cleft of the buttock, follow it upward with the eye to see if the spinous processes are in alignment with it. Do not be satisfied with the consideration of lateral deviation only. Consider most carefully the anteroposterior curves in relation to the centre of gravity. You cannot have alteration of the normal anteroposterior curves without a loss of equilibrium, resulting in chronic muscle strain in the endeavor to compensate and maintain poise. Alteration in these curves upsets

the support of abdominal viscera, strains mesenteric attachments, permits ptosis and the innumerable complications resultant therefrom.

A much neglected factor in mechanical diagnosis in general practice is the costal alignment. Much more is dependent upon the maintenance of an equal distance between the ribs than might be expected at first thought. The normal slant of the ribs predisposes to their sagging when there is lack of tonicity or underdevelopment of the intercostal muscles, and the mobility of the costovertebral articulations is so great that trauma is a frequent cause of slight derangement of individual ribs. Either sagging or individual displacement may cause pressure on intercostal nerves. While at first thought the general practitioner might not expect anything more than a local neuralgia or neuritis from such a condition, it can easily be seen how this pressure could, if continued, result in a reflex disturbance of the corresponding spinal segment and through it, by the anterior nerves, an actual change of function of organs whose nerve supply emanates from this section of the cord, or, in other words, a visceral disease.

From the general inspection, the mechanical physician proceeds to a more detailed examination of the supporting structures. He examines by superficial and deep palpation the comparative position of each vertebra, and tests thoroughly the degree of mobility of each vertebral and costovertebral articulation. The function of a joint is motion. Each joint has certain normal degrees of mobility. Alteration of mobility is a change of function and is, therefore, pathological. The significance of this pathological condition is not confined to the joint itself. Its importance is far reaching. When the diagnostician discovers altered function in a joint he should at once consider to what degree it can interfere with adjacent nerve structure, and what effect that interference may have upon organs controlled by such nerves.

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Completing the mechanical diagnosis, the problem of adjustment becomes more a matter of art than of ironclad rule. Manual adjustment can no more be taught didactically or by textbook than can surgery. It is an art. Arriving at the diagnosis by the most scientific means of mechanical analysis, manual correction becomes a matter of personal skill in the accurate and delicate application of force with the fingers for the purpose of securing the greatest mechanical advantage with the certainty of avoiding injury, yet of accomplishing a distinctly corrective change in the relative position of lever and fulcrum.

In the discussion of previous papers upon this subject in the sessions of this society, the point has been raised that mechanical therapeutics was indicated in mechanical conditions and contraindicated in all other conditions. Is not this begging the question? If histology and pathology have been correctly defined, are there any conditions of the living organism which have not a mechanical aspect?

Attending physicians are glad to secure the assistance of specialists in many conditions, and if manual adjustment offers a new and better method of correcting some conditions hitherto not considered mechanical, surely this will be welcome news, and the operators in this specialty will be placed in the list available at the doctor's call.

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